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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/665,989

09/19/2003

Stefan Rossmann

34874-061 UTIL

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05/07/2008

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY & POPEO, P.C.

ATTN: PATENT INTAKE CUSTOMER NO. 64280

ONE FINANCIAL CENTER

BOSTON, MA 02111

EXAMINER

HOANG, HIEU T

ART UNIT

PAPER NUMBER

2152

MAIL DATE

DELIVERY MODE

05/07/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/665,989

Applicant(s)

ROSSMANITH ET AL.

Examiner

HIEU T. HOANG

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 12-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CIS)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/11/2008 has been entered.
2. Claims 8-11 are cancelled.
3. Claim 21 is new.
4. Claims 1-7 and 12-21 are pending.

Response to Amendment

5. The objection of claim 8 has been withdrawn due to cancellation of the claim.
6. The 35 U.S.C. 101 rejection of claims 8-11 has been withdrawn due to cancellation of the claims.
7. The 35 U.S.C. 112 rejection of claims 9-11 has been withdrawn due to cancellation of the claims.

Response to Arguments

8. Applicant's arguments on have been fully considered but they are unpersuasive.
9. Applicant argues that Stewart-Whitehead fails to disclose the use of business logic to select messages to be exchanged between applications. The use of business

logic to select messages to be exchanged between applications is not recited in the claims. Applicant is required to provide support for "the messages being selected based on an application of the configuration-specific collaboration descriptions captured in the integration directory" in the specification. The only nearest portion that is found in the specification is [0052], regarding determining whether the message should be sent to the business process engine; however, it does not recite "the messages being selected based on an application of the configuration-specific collaboration descriptions captured in the integration directory."

10. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

11. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Stewart is directly related to an electronic commerce system with business logic (abstract). Whitehead is related to customer nodes interact with heterogeneous software components and distributed services in network (abstract). In this case, one skilled in the art would be motivated to combine the teachings of Stewart and Whitehead to implement network component structure of Whitehead to business logic of Stewart in order to provide heterogeneous and distributed software and service components throughout the network (Whitehead, abstract).

Claim Rejections - 35 USC § 101

12. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

13. Claims 1-7 and 19 and 20 are rejected under 35 U.S.C. 101 the claimed invention is directed to non-statutory subject matter. Although the claims are system claims, all claimed elements are software (such as layers, repository, directory, software server), rendering the claim non-statutory. For the 35 U.S.C. 101 rejection of claims 1-7, the amended "integration server that is implemented on a processor" still renders the "integration server" a software module, because software can be implemented or executed by a processor. Also, [0057] of the specification recites that a system can be implemented as a "middleware" which is software.

14. Claim 21 is rejected under 35 U.S.C. 101 the claimed invention is directed to non-statutory subject matter. Since no explicit definition of "article" can be found in the

specification, an article does not belong to any one of statutory classes of a process, a machine, a manufacture and a composition of matter. Furthermore, an article comprising a machine-readable medium can be just a piece of paper having software instructions written thereon and is therefore non-statutory.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1-7, 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart et al. (US 2002/0161688, hereafter Stewart), in view of Whitehead et al. (US 6,085,030, hereafter Whitehead).

17. For claim 1, Stewart discloses an integrated message exchange system for collaborative business applications, comprising:

an integration server that is implemented on a processor (fig. 8, c-space manager) and that comprises a message transport layer that transports messages from at least one sending application of the one or more installed applications to one or more receiving applications of the one or more installed applications (fig. 8, message handling

and transport protocol between sending and receiving application of collaborators 216 and 218);

a business process layer that executes business process logic on selected messages processed by the message transport layer (fig. 8, [0130], business protocol management layer executes business process logic),

a persistence layer, accessible from both the message transport layer and the business process layer (fig. 8, conversation management layer), and storing a reference to each message processed by the message transport layer ([0140], conversation management tracks and manages business conversations, ensures that they are completed, and orchestrates the overall process execution, [0142], conversation context distinguishes among different business transactions, allows concurrent conversations, integrity and security, fig. 19, for stored information relating to each message).

Stewart does not explicitly disclose:

an integration repository, that captures pre-loaded collaboration descriptions of a plurality of applications between which communication could be enabled via the integrated message exchange system, the pre-loaded collaboration descriptions being captured in the integration depository at design time,

a system landscape directory listing one or more installed applications with which the integrated message system communicates;

an integration directory that captures configuration-specific collaboration descriptions of the one or more installed applications listed in the system landscape directory by referencing the integration repository;

the messages being selected based on an application of the configuration-specific collaboration descriptions captured in the integration directory,

However, Whitehead discloses:

an integration repository (fig. 2, component registry), that captures pre-loaded collaboration descriptions of a plurality of applications between which communication could be enabled via the integrated message exchange system (fig. 2, col. 4 lines 56-67, storing application descriptions in description repository 258), the pre-loaded collaboration descriptions being captured in the integration depository at design time (col. 10 lines 1-26, global component registry for all application requests is preloaded or pre-stored),

a system landscape directory listing one or more installed applications with which the integrated message system communicates (fig. 2, component consumer application 210 used by a client);

an integration directory that captures configuration-specific collaboration descriptions of the one or more installed applications listed in the system landscape directory by referencing the integration repository (fig. 2, col. 5 lines 15-45, component management service (CMS) 280 for matching and binding offered components upon client application request from component consumer application by referencing component registry 252);

the messages being selected based on an application of the configuration-specific collaboration descriptions captured in the integration directory (col. 5 lines 15-45, matching and binding requested application components with registered

components in the repository using application descriptions (configuration-specific collaboration descriptions) in the component registry (integration directory) then passes the matched component to the requesting component consumer);

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Stewart and Whitehead to implement network component structure of Whitehead to business logic of Stewart in order to provide heterogeneous and distributed software and service components throughout the network (Whitehead, abstract).

18. For claim 2, Stewart-Whitehead discloses the invention as in claim 1. Stewart-Whitehead further discloses a database, accessible via the persistence layer, for storing a copy of each of the messages corresponding to the message references stored in the persistence layer (Stewart, fig. 19, message copy).

19. For claim 3, Stewart-Whitehead discloses the invention as in claim 1. Stewart-Whitehead further discloses the message transport layer includes a physical address resolution service, and a transport service (Stewart, fig. 8, transport layer).

20. For claim 4, Stewart-Whitehead discloses the invention as in claim 1. Stewart-Whitehead further discloses a logical routing service for determining the one or more receiving applications based on the business process logic (Stewart, fig. 21, [0130],

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logical routes from incoming message to outgoing message according to conversation coordinator).

21. For claim 5, Stewart-Whitehead discloses the invention as in claim 1. Stewart-Whitehead further discloses the business process layer includes a business process engine for executing the business process logic (Stewart, [0130], business logics are executed at the business layer).

22. For claim 6, Stewart-Whitehead discloses the invention as in claim 5. Stewart-Whitehead further discloses the business process logic is executed according to one or more business processes stored in a directory accessible by the business process engine (Stewart, fig. 16, business processes accessible by business integration service).

23. For claim 7, Stewart-Whitehead discloses the invention as in claim 6. Stewart-Whitehead further discloses the one or more business processes are accessed by the business process engine based on content of each selected message (Stewart, fig. 16, engine executes workflow instances or business processes based on content of the instances from the instance store).

24. For claim 19, Stewart-Whitehead discloses the invention as in claim 1. Stewart-Whitehead further discloses the integration server comprises: a runtime engine that

provides messaging and business process control at runtime (Stewart, [0062], an infrastructure that provides business to business (B2B) application collaboration by dynamic messaging and controlling business processes at runtime) for connecting the one or more installed applications; and one or more integration services that are specific to one or more of the one or more installed applications (Whitehead, installed applications and services).

25. For claim 20, Stewart-Whitehead discloses the invention as in claim 1. Stewart-Whitehead further discloses the integration server is a dedicated server that applies the collaboration knowledge from the integration directory in a runtime collaboration environment (Stewart, fig. 1, collaboration server, [062], on the fly B2B collaboration updates).

26. For claim 12, Stewart discloses in a collaborative business application landscape, a method for integrated message exchange, comprising:

- receiving a message from a sending application of the one or more applications (fig. 7, step 194, fig. 21, incoming message);

- storing a copy of the message in a database; storing a reference to the message in a persistence layer (fig. 19, message copy, [0142], conversation context or reference to the message in the conversation manager);

- executing at least one business process on the message (fig. 7 step 196, [0141], business process and rules on processing business messages),

based on the message reference stored in the persistence layer, transporting the message to at least one receiving application of the one or more applications (fig. 7 step 210, fig. 21, [0142], outgoing message to a recipient according to the conversation context of that message);

Stewart does not explicitly disclose:

capturing configuration-specific collaboration descriptions of one or more applications installed in an exchange infrastructure, the capturing comprising reading from a listing of the one or more installed applications that is stored in a system landscape directory and referencing an integration repository that has captured, at design time, collaboration descriptions of a plurality of applications between which communication could be enabled in the exchange infrastructure;

the message being selected based on an application of the configuration-specific collaboration description captured in the integration directory.

However, Whitehead discloses:

capturing configuration-specific collaboration descriptions of one or more applications installed in an exchange infrastructure, the capturing comprising reading from a listing of the one or more installed applications that is stored in a system landscape directory (fig. 2, col. 5 lines 15-45, component management service (CMS) 280 for matching and binding offered components upon client application request from component consumer application by referencing component registry 252) and referencing an integration repository that has captured, at design time, collaboration descriptions of a plurality of applications between which communication could be

enabled in the exchange infrastructure (fig. 2, col. 4 lines 56-67, component registry pre-storing application descriptions in description repository 258);

the message being selected based on an application of the configuration-specific collaboration description captured in the integration directory (col. 5 lines 15-45, matching and binding requested application components with registered components in the repository using application descriptions in the component registry then passes the matched component to the requesting component consumer).

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Stewart and Whitehead to implement network component structure of Whitehead to the system of Stewart in order to provide heterogeneous and distributed software and service components throughout the network (Whitehead, abstract)

27. Claim 21 is rejected for the same rationale as in claim 12.

28. For claim 13, Stewart-Whitehead discloses the invention as in claim 12. Stewart-Whitehead further discloses transporting the message includes resolving a physical address of the at least one receiving application (Stewart, fig. 19, trading partner identifier and extended property set for addressing a message recipient).

29. For claim 14, Stewart-Whitehead discloses the invention as in claim 12. Stewart-Whitehead further discloses accumulating, in the persistence layer, two or more

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message references of related messages (Stewart, [0129], related messages are grouped to a conversation).

30. For claim 15, Stewart-Whitehead discloses the invention as in claim 14. Stewart-Whitehead further discloses transporting the message includes: accessing and grouping the messages associated with the accumulated message references; and transporting the grouped messages to the at least one receiving application (Stewart, [0129], related messages are grouped into a conversation, multiple conversations can be processed concurrently between trading partners).

31. For claim 16, Stewart-Whitehead discloses the invention as in claim 12. Stewart-Whitehead further discloses executing the at least one business process includes: determining the at least one business process based on the message content; instantiating the at least one business process in a server; and executing the at least one instantiated business process with a business process engine (Stewart, fig. 16, business processes are instantiated executed by an engine).

32. For claim 17, Stewart-Whitehead discloses the invention as in claim 16. Stewart-Whitehead further discloses the executing the at least one instantiated business process utilizes the message reference in the persistence layer (Stewart, [0142], message reference or context is utilized to recognize which conversation the message belongs to).

33. For claim 18, Stewart-Whitehead discloses the invention as in claim 12. Stewart-Whitehead further discloses upon executing the at least one business process, sending the message reference to a message transport layer for transporting the message to at least one receiving application (Stewart, fig.7, fig. 16, [0142], an engine executes business processes using contexts and transport the message to a receiving application).

Conclusion

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HH

/Bunjod Jaroenchonwanit/
Supervisory Patent Examiner, Art Unit 2152